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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,647	01/23/2009	Pieter Johannes Werkman	NL03 1399 US1	4791
24738 7590 06/08/2011 PHILIPS INTELLECTUAL PROPERTY & STANDARDS PO BOX 3001 BRIARCLIFF MANOR, NY 10510-8001			EXAMINER	
			STAPLETON, ERIC	
BKIAKCLIFF I	VIANOK, NY 10510-8	001	ART UNIT PAPER NUMBER 3742	
			NOTIFICATION DATE	DELIVERY MODE
			06/08/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

vera.kublanov@philips.com debbie.henn@philips.com marianne.fox@philips.com

	Application No.	Applicant(s)	
	10/579,647	WERKMAN ET AL.	
Office Action Summary	Examiner	Art Unit	
	ERIC STAPLETON	3742	
The MAILING DATE of this communication ap Period for Reply	ppears on the cover sheet w	ith the correspondence addre	ss
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING ID. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNI: .136(a). In no event, however, may a individual of the community and will expire SIX (6) MON te, cause the application to become Af	CATION. reply be timely filed NTHS from the mailing date of this comm BANDONED (35 U.S.C. § 133).	
Status			
1) ☐ Responsive to communication(s) filed on <u>01 I</u> 2a) ☐ This action is FINAL . 2b) ☐ This action is FINAL . 2b) ☐ This action for allowed closed in accordance with the practice under	is action is non-final. ance except for formal mat	•	erits is
Disposition of Claims			
4) ☑ Claim(s) 1-8 is/are pending in the application. 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☑ Claim(s) 1-8 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/	awn from consideration.		
Application Papers			
9) The specification is objected to by the Examin 10) The drawing(s) filed on is/are: a) ac Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	cepted or b) objected to e drawing(s) be held in abeyar ction is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1	` '
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat * See the attached detailed Office action for a list	nts have been received. nts have been received in A ority documents have been au (PCT Rule 17.2(a)).	application No received in this National Sta	ige
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) ☐ Interview S Paper No(Summary (PTO-413)	

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DETAILED ACTION

Specification

The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (I) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a)

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and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5 and 8 rejected under 35 U.S.C. 102(b) as being anticipated by US 2002/00027130 A1 to Miyata, hereinafter, "Miyata".

Miyata discloses:

Regarding claim 1: a film heating element (para [0032]), at least comprising an aluminum substrate (para [0033]), an electrically insulating layer which is based on a sol-gel precursor (para [0072] and [0116]), and an electrically resistive layer (para [0115]) with a thickness smaller than 2 μ m (para [0090] and [0251]-[0252]);

Regarding claim 2: the electrically resistive layer comprises an inorganic material (the inorganic adhesive agent can be part of the resistive layer) (para [0116]);

Regarding claim 5: the heating element further comprises a conductive layer (para [0073] and [0096]); and

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Regarding claim 8: a method of manufacturing a heating element according to claim 1 (abstract), at least comprising the steps of: providing an aluminum substrate (para [0033]); applying an electrically insulating layer on the substrate (Fig. 24 and para [0267]-[0276]); and applying a resistive layer on top of the electrically insulating layer (para [0115]), characterized in that the electrically insulating layer is obtained by means of a sol-gel process (para [0072] and [0116]) and the resistive layer has a thickness smaller than 2 μ m (para [0090] and [0251]-[0252]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that

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the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyata in view of US 2003/0042241 A1 to Uekawa et al., hereinafter, "Uekawa".

Miyata discloses substantially all of the features of the claimed invention as set forth above.

Miyata fails to disclose:

the sol-gel precursor is a hybrid sol-gel precursor comprising an organosilane compound (as recited in claim 3); and

the organosilane compound comprises methyl-trimethoxysilane or methyl-triethoxysilane (as recited in claim 4).

However, Uekawa discloses:

Regarding claim 3: the sol-gel precursor is a hybrid sol-gel precursor comprising an organosilane compound (para [0093]); and

Regarding claim 4: the organosilane compound comprises methyl-trimethoxysilane or methyl-triethoxysilane (para [0093]).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Miyata as suggested and taught by Uekawa in order to provide effective coupling treatment as a method of substrate pretreatment (Uekawa: para [0093]).

Claims 6 and 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Miyata in view of US 6,617,554 B2 to Moon et al., hereinafter, "Moon".

Miyata discloses substantially all of the features of the claimed invention as set forth above.

Miyata fails to disclose:

an electrical domestic appliance comprising at least a heating element in accordance with claim 1 (as recited in claim 6); and

an electrical domestic appliance according to claim 6, characterized in that the electrical domestic appliance comprises a (steam) iron, a hair dryer, a hair styler, a steamer and a steam cleaner, a garment cleaner, a heated ironing board, a facial steamer, a kettle, a pressurized boiler for system irons and cleaners, a coffee maker, a deep-fat fryer, a rice cooker, a sterilizer, a hot plate, a hot-pot, a grill, a space heater, a waffle iron, a toaster, an oven, or a water flow heater (as recited in claim 7).

However, Moon discloses:

Regarding claim 6: an electrical domestic appliance (abstract) comprising at least a heating element with an aluminum ceramic based on a sol-gel precursor (col 4, ln 64-67 and col 5, ln 1-13); and

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Regarding claim 7: an electrical domestic appliance according to claim 6, characterized in that the electrical domestic appliance comprises a (steam) iron, a hair dryer, a hair styler, a steamer and a steam cleaner, a garment cleaner, a heated ironing board, a facial steamer, a kettle, a pressurized boiler for system irons and cleaners, a coffee maker, a deep-fat fryer, a rice cooker, a sterilizer, a hot plate, a hot-pot, a grill, a space heater, a waffle iron, a toaster, an oven, or a water flow heater (abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Miyata as suggested and taught by Moon in order to provide a heating unit to heat the cooking enclosure of an oven (Moon: col 1, ln 12-17).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC STAPLETON whose telephone number is (571)270-3492. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on (571) 272-4856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Henry Yuen/ Supervisory Patent Examiner, TC 3700

Eric Stapleton
/ERIC STAPLETON/
3 June 2011
Examiner, Art Unit 3742